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The Increase Of Unprepared Dissonance  
In Modern Music (Haydn-Brahms.)



**THE INCREASE OF UNPREPARED DISSONANCE  
IN MODERN MUSIC  
(HAYDN-BRAHMS)**

**BY**

**CLARA ELIZABETH DAVIS**

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**THESIS**

**FOR THE**

**DEGREE OF BACHELOR OF MUSIC**

**IN**

**THE SCHOOL OF MUSIC**

**OF THE**

**UNIVERSITY OF ILLINOIS**

**1916**



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THIS IS TO CERTIFY THAT THE THESIS PREPARED UNDER MY SUPERVISION BY

Clara Elizabeth Davis

ENTITLED The Increase of Unprepared Dissonance in Modern Music

(Haydn to Brahms)

IS APPROVED BY ME AS FULFILLING THIS PART OF THE REQUIREMENTS FOR THE DEGREE

OF Bachelor of Music


HEAD OF DEPARTMENT OF

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## THE INCREASE OF UNPREPARED DISSONANCE.

### I

#### INTRODUCTION

Music, to avoid monotony, must be formed of varied harmonies. Music made up entirely of consonant chords and intervals is extremely uninteresting. It lacks life and vigour. On the other hand, music containing only dissonances would cease to be music. It would be noise. Music then would be far from satisfactory if it were limited to either one or the other of these chords and intervals. As is universally the fact, the appreciation of the beautiful is the keener when it is brought into direct contact with that which is not beautiful. It is from this fact that the harshest dissonances are accepted in music. It is the force of contrast which the ear instinctively demands.



## II

### WHAT IS A DISSONANCE?

What is a dissonance? But, perhaps, better first, what is a consonance? Broad and simple definitions are: "Consonance is the combination of sounds which when sounded together has an effect upon the hearer of being complete in itself and not needing anything to follow as an ending",<sup>1</sup> while, "A dissonance is the combination of sounds which when occurring together produce an impression of incompleteness. It is felt that something more is needed just as when a speaker is interrupted, his voice is at a pitch which tells that more is to follow".

A more definite, though not too technical explanation is, - Independent chords are those composed of consonant intervals only.<sup>2</sup> Dependent chords are those containing one or more dissonant intervals and requiring the progression to an independent chord.

However, to arrive at the fundamental explanation of intervals of any kind one must turn to acoustics; the study of sound and its relation to music. The phenomenon of sound is such an extensive technical science that it is possible to barely touch on it in this paper.

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1- The American History and Encyclopedia of Music

2- G. F. Schwartz "Catechism of Harmony" p.23



Sound is a form of motion caused by the vibrations of particles of bodies. The quality is determined by regularity of these vibrations. The more regular and periodic they are, the more musical is the sound which is called tone. As the vibrations become more irregular, the less musical is the sound until, when all regularity has disappeared, the sound is not spoken of as tone, but mere noise. Just exactly when in this process tone disappears and noise appears is a debatable question and one upon which musicians differ. No line is yet sharply drawn. However, a sound to be called a musical sound must be agreeable to the ear. All sounds produced by imperfect instruments must be rejected as must all whose itches are too high or too low.

Pitch is determined by the number of vibrations that a sounding body makes a second. The low notes are caused by the low number while the high notes are caused by the large number of vibrations per second. For example middle C has 256 vibrations per second, while the fifth above, G, has 384. The notes comprised between 27 and 4000 vibrations per second an interval of more than seven octaves are those which are almost universally accepted. An interval in music is the difference in the ratio of the numbers of vibrations between two notes.

"It may be established as one of the fundamental principles of our music that the ear can only endure tones, be they simultaneous or successive on this condition - namely:- that they bear simple ratios to each other in respect of the numbers of their vibrations per second; that is, that the ratio of the number of





vibrations should be expressed by low numbers."

The most simple ratio between the vibrations per second of any two notes is that in which both are expressed by the same number. When two notes have this ratio they are said to be in unison -1:1. This ratio is the most perfect in harmony. The other perfect interval is that of the octave whose ratio is 2 : 1.

Other simple relations are furnished by the fundamental note united to one of the notes of the harmonic series 2,3,4,5etc. The note 2 represents as has been seen, the octave; the note 3 is the twelfth, or, as it may be called the fifth of the octave. All these notes form agreeable harmonies with the fundamental note. Their only defect, musically speaking, is that the intervals between them and the fundamental note are very great".<sup>1</sup> By experiment it has been found that the notes of the harmonic series are consonant not only with the fundamental but with each other.

The ration of dissonant intervals, on the other hand, are represented by higher numbers. At the present time the seventh harmonic represents the line of demarcation between consonant and dissonant intervals.

Below is given the table of harmonies in the interval of an octave as given by Glaserna:

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1. Blaserna Sound and Music p. 86





Perfectly Consonant	$\left(\frac{3}{2}\right)$ - 2:3- harmony of 5th
	$\left(\frac{4}{3}\right)$ - 3:4-harmony of 4th.
Consonant	$\left(\frac{5}{3}\right)$ - 3:5 harmony of Maj. 6th
	$\left(\frac{5}{4}\right)$ - 4:5 harmony of Maj. 3rd.
Imperfectly Consonant	$\left(\frac{6}{5}\right)$ - 5:6 harmony of Min. 3rd
	$\left(\frac{8}{5}\right)$ - 5:8 harmony of Min. 6th.

Hiatus formed by 7th harmonic.

Dissonant	$\left(\frac{9}{8}\right)$ - 8:9 harmony of Maj. 2nd.
	$\left(\frac{10}{9}\right)$ - 9:10harmony of Maj. 2nd.

As is shown below the seventh is consonance and above it dissonance.

unison Maj. 2<sup>nd</sup> Maj. 3<sup>rd</sup> Per. 4<sup>th</sup> Per. 5<sup>th</sup> Maj. 6<sup>th</sup> Maj. 7<sup>th</sup> Per. Octave

1  $\frac{9}{8}$   $\frac{5}{4}$   $\frac{4}{3}$   $\frac{3}{2}$   $\frac{5}{3}$   $\frac{15}{8}$  2

true or just scale.



As has been stated an interval is the difference between two tones. Naturally every interval must be either a dissonant or a consonant one.

The dissonant intervals are the major and minor sevenths and seconds, and all augmented and diminished intervals.

Minor second contains	1	S. T. (semi-tone)
Major second "	2	S. T.
Augmented second "	3	S. T.
Diminished third "	2	S. T.
Augmented fourth "	6	S. T.
Augmented fifth "	8	S. T.
Augmented sixth "	10	S. T.
Diminished seventh	9	S. T.
Minor seventh "	10	S. T.
Major seventh "	11	S. T.

A dissonant chord or discord is a harmonic figure or combination of more than two tones which contains one or more dissonant intervals.



### III.

#### CLASSIFICATION OF DISCORDS.

##### Chords of the Seventh.

Chord of the seventh is the simplest dissonance.

Chord of the seventh has three inversions:

fundamental position 7:

first inversion:  $\begin{matrix} 6 \\ 5 \text{ or } 5 \\ 3 \end{matrix}$

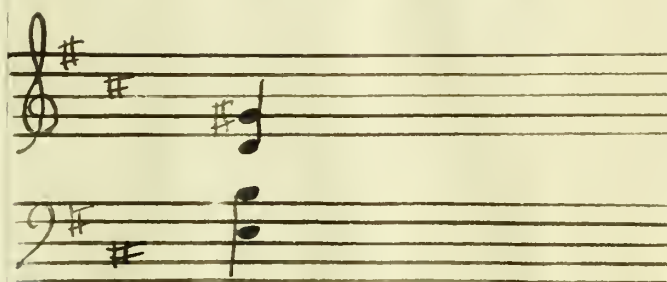
second inversion:  $\begin{matrix} 6 \\ 4 \text{ or } 3 \\ 3 \end{matrix}$

third inversion:  $\begin{matrix} 6 \\ 4 \text{ or } 2 \\ 2 \end{matrix}$

##### Dominant Seventh - V.<sup>7</sup>

Used in either major or minor; also formed in same manner.

Haydn. Sonate II for Piano and Violin



V<sup>7</sup> (measure 50)



## Secondary Seventh Chords

In addition to the principal chord of the seventh,  $V^7$ , secondary seventh chords are found on the remaining degrees of the scale, in both major and minor. They are made by adding over the fifth of each triad the third which belongs to the key.

The secondary seventh chords in Major are:

C.  $I^7$   $ii^7$   $iii^7$   $IV^7$   $V^7$   $vi^7$   $vii^7$

In Minor are:

$i^7$   $ii^7$   $III^{+7}$   $iv^7$   $V^7$   $VI^7$   $vii^7$







The most important and most frequently occurring secondary chords of the several in major are those of the second and seventh. Those in minor of most importance perhaps, are the sub-dominant and leading tone seventh chords.

Below is a table of the

Formation of Seventh Chords

Major:

$I^7$	contains	M. 3rd;	P. 5th;	M. 7th
$ii^7$	"	m. 3rd;	P. 5th;	m. 7th
$iii^7$	"	m. 3rd;	P. 5th;	m. 7th
$IV^7$	"	M. 3rd;	P. 5th;	M. 7th
$V^7$	"	M. 3rd;	P. 5th;	m. 7th
$VI^7$	"	m. 3rd;	P. 5th;	m. 7th
$VII^{o7}$	"	m. 3rd;	d. 5th;	m. 7th

Minor:

$i^7$	"	m. 3rd;	P. 5th;	M. 7th
$ii^{o7}$	"	m. 3rd;	P. 5th;	m. 7th
$III^{+7}$	"	M. 3rd;	A. 5th;	M. 7th
$iv^7$	"	m. 3rd;	P. 5th;	m. 7th
$v^7$	"	M. 3rd;	P. 5th;	m. 7th
$VI^7$	"	M. 3rd;	P. 5th;	M. 7th
$VII^{o7}$	"	m. 3rd;	d. 5th;	d. 7th



Chords of the seventh have been called the essential discords of harmony.

### Chords of the Ninth

The chord of the ninth is a five-tone chord and is made by adding another higher third to the seventh chord.

The most important ninth chord is that of the dominant  $V^9$ . The  $V^9$  contains, in major, an M 3rd, P 5th; and an M. 9th; in minor, M. 3rd, P. 5th, and an M 9th.

Its treatment is similar to that of the Seventh. The seventh of the ninth chord is never omitted. The five tones are seldom used in their complete form. Often the root is omitted (making an incomplete chord).

Haydn. Sonate VII for piano and violin





## Other Discords

Diminished triad is the diminished fifth.

Augmented triad is minor III.

Its dissonance is the augmented fifth.

This dissonance can be very effectively used.

Augmented Sixth Chords.

The interval of the augmented sixth is made by altering chords on various limited degrees of the scale in both major and minor.

Altered Chords.

Chords in which one or more tones are chromatically changed are recognized as altered chords.

One tone chromatically altered necessarily modifies the entire chord for the intervals which make up the chords become altered too. These altered chords must not create a modulation.

Inversions are permitted.

Dissonant Intervals caused by Passing Notes and Changing notes.

A passing tone is one inserted between harmonic notes, in scale-wise progression and is foreign to the chord with which it appears. They must occur on unaccented counts in a measure.

A changing note is similar to a passing note. It appears on accented part of the measure.



Dissonance Introduced by Organ Point.

Organ point is the sustaining of a harmonic figure through one or more voices through a succession of various other harmonies sometimes forming a consonant part, but the other times being foreign or dissonant to them.





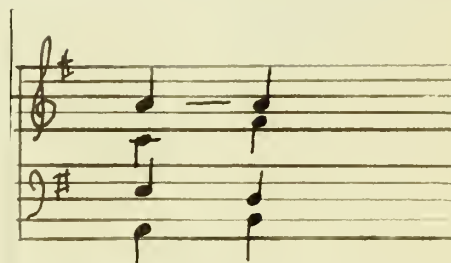
# IV.

## UNPREPARED DISSONANCE

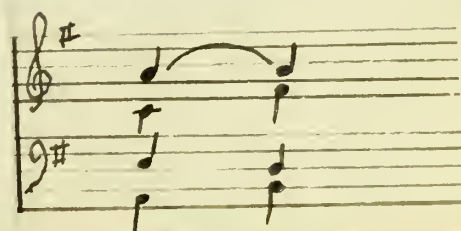
To understand the term "unprepared" dissonance one must first be familiar with "prepared" dissonances and "preparation" in music.

This point -- of what constitutes a "preparation" -- is one upon which theorists differ. Nearly all agree that some consideration should be taken in the manner of introducing a dissonance; but it is in what constitutes a "preparation" that there is a difference of opinion.

Some contend that a dissonance is prepared if the dissonant tone has been used as a consonant member of a preceeding chord, for example:



Others contend that a dissonant interval to be prepared must not only have the dissonant tone used in the preceeding chord, but it must be tied over, - for example:





The duration of a preparation must be at least as long as that of the dissonance following it. The prepared tone may be longer than the dissonant tone following it, but it will rarely be considered good to have a preparation shorter than the dissonance.<sup>1</sup>

The preparation of a dissonance may occur on either an accented or an unaccented part of the measure.

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1. Jadassohn Harmony p. 72



## V.

### HISTORY

Harmony as we know it, was not really recognized until the sixteenth century. However, music has been enjoyed and revered by people as early as history has any account.

A manuscript of the eleventh century gives the first distinct account of this method of singing. There were two forms of organum:<sup>1</sup>

(1) the parts moved in paralalled intervals of the octave, fifth or fourth; the parts might be two, three or four, (2) a freer form in which the parts, 2 or 3 in number, did not move throughout in absolute parallilism, but in oblique motion with a resulting mixture of intervals was premitted near the end of the line.

"In the strict primitive organum only the intervals recognized as accords viz. fifths and fourths were allowed in connection with unisons and octaves. The freer form admitted transient thirds and sixths although held as dissonances. In the fourteenth century the fouxbourdon (false bass) appeared. In this form the intervals of thirds and sixths were used with beautiful effect."

Thus it is seen that the music of the early times permitt-

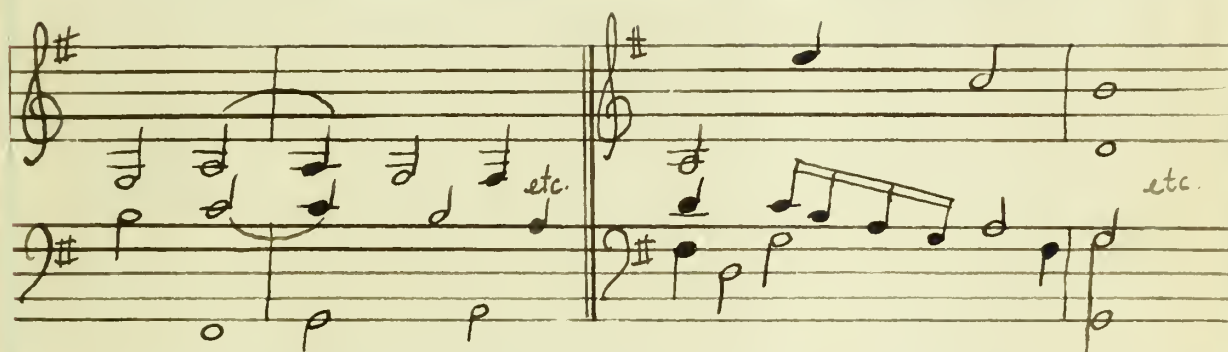




ed essentially the use of only consonant , or at most prepared dissonance intervals.

It was Claudio Monteverde (1567-1643) who first used the unprepared discord.

"In 'Cruda Amarilli' .....we find exemplifications of nearly all the most important points of divergence between the two opposite systems, not excepting the crucial distinctions involved in the use of the diminished triad, and the unprepared dissonance of the 7th and 9th:-



Up to this time 7ths had been heard only in the form of suspensions or passing notes, as in 'Stracciami pur il core'. The unprepared events - the never failing test by which the modern school may be distinguished from the ancient, the free style from the strict - was absolutely new; and it was regarded by contemporary musicians as so great an outrage upon artistic propriety that one of the most learned of them, Giovanni Maria Artusi of Bologna, published in the year 1600 a work entitled 'Delle imper-





fittisne della moderna musica' in which he condemned the unwonted progressions found in 'Cruda Amarilli' on the ground that they were altogether opposed to the nature of legitimate Harmony."

The introduction of dissonant chords has always encountered opposition. The complications of harmony have always followed the introduction of dissonant intervals.

Arthur Foote says "Counterpoint was the birth place of dissonances."

John F. Runciman<sup>1</sup> says, "Many years ago the first intentional 'unprepared discord' was written by Monteverde. Since 1643, perhaps, a couple of hundred new and intentional ones have been put to paper, and certainly as many millions that were not meant."

Frederick Stock was recently asked how he would classify most of the music - so called-of the present day. Mr. Stock answered,<sup>2</sup> "Dissonance and discomfort".

In modern music discords in greater quantity and new "harsher" discords are ever appearing.<sup>3</sup>

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1. The New Music Review "April" - Another Ode to Discord.

2. "Musical Leader," March 30, 1916.

3. "London Musical Times", "Probleem of Discord" by M.D. Calvocoressi.



## VI.

### NOTES ON RESEARCH WORK.

To discover whether and to what extent there has been an increase in the use of unprepared dissonance various works of the two composers, Haydn (1732-1809) and Brahms (1806-1872) have been examined.

In this research work, I have examined every fifth measure and I counted only those measures which were complete. I did not consider an incomplete measure as existing. With every work I began my investigation with the fifth complete measure and numbered it one, the tenth measure I numbered two, etc.

As far as possible I selected similar works of the composers. For instance when I examined a quartette by Haydn, I selected a quartette by Brahms.

I examined only the first movement of a work. First, I examined one of Haydn's movements and then counted an equal number of measures in the first movement of a similar work by Brahms, for Brahms' works are almost always longer than those of Haydn.



Following are summarized records of research work.

HAYDN

COMPOSITION	No. of measures examined	No. of Unp. dis. Dis.
Sonaten I. Andante G. Dur. Piano & Violin	31	16
Sonaten II. Allegro " " "	30	10
Sonaten IV. Moderato A-" " "	16	14
Sonaten VII. Allegro, Moderato	34	29
Sonaten VIII Allegro, Moderato	37	22
Symphony No. 13 "Surprise" " " "	51	27
"The Creation"	177	66
Quartette C - Dur Op. 76. No. 3 Allegro fur swei violino, viola and violincello (Kaiser)	25	17
Quartette (Sieben Worte ) Op. 51 Intr. and Largo	25	24
Sonaten (No. 11-20) Band II. Piano	247	66

Total number of measure examined .....673

Total number of unprepared disson-

ances discovered ..... 291



# BRAHMS

..... Composition	No. of meas- ures examined.	No. of Dis- covered.
Sonate G. Dur. Op. 78. Piano and Violin	31	50
Sonate D. Moll Op. 108 " " "	30	26
Sonate A. Dur Op. 100 " " "	16	23
Sonate Op. 99 " " Viölinzell	46	38
'Ein Deutsches Requiem"	177	153
Quartette C- Moll. Op. 51 No. 1. für swei Violonen, viola and violoncell	20	16
Quartette A-Moll Op. 51. No. 2	34	20
Sonata in F. Minor Piano Allegro Maestoso and Andante	79	71
Waltzes, Piano Op. 39	61	49
Rhapsody in G. Minor Op. 79 No. 2 Piano	24	11
Cappriccio, E-Dur Op. 76 No. 5 "	23	19
Intermezzo, Op. 76 No. 7 "	9	10
Cappriccio Op. 76 No. 8.	13	25

Total number of measures examined .....663

Total number of unprepared dissonances  
discovered .....511





Following are the detailed records of research work:

Haydn

Sonaten I, Andante, G. Dur. Piano and Violin (Edition Peters).

Number of measures examined .....31.      Number of unprepared dissonances discovered .....16.

D. 5.	Measure 5	M2	Measure 18
M 7 (3) <sup>1</sup>	Measure 7	M7 (2)	Measure 18
M7	Measure 11	M7	Measure 25
M7	Measure 11	M7	Measure 25
M7	Measure 12	M7 (2)	Measure 25
M7	Measure 15	M7	Measure 31

Sonaten II, Allegro. Number of measures examined ...30

Number of unprepared dissonances discovered ....10.

M7	Measure 2	A4	Measure 18
M2.	Measure 2	M7	Measure 18
d7	Measure 8	M2	Measure 25
A2	Measure 9	M7	Measure 11
M7	Measure 10	M7	Measure 30

.....

1. A number in parenthesis beside a dissonance in this record signifies the number of like dissonances in same measure.



Sonaten IV. Moderato in A Dur. Number of measures  
examined ..... 16. Number of unprepared dissonances .....14.

M2 Measure 2	d7 Measure 7
m7 Measure 2	A4 Measure 9
d7 Measure 5	m7 Measure 10
m7 Measure 3	m7 Measure 11
m2 Measure 5	m7 Measure 15
m7 Measure 6	m7(2) Measure 7

Sonaten VII. Allegro Moderato, Number of measures  
examined .....34. Number of dissonances discovered.....29.

m7 Measure 1	m2 (2) Measure 14
m7 " 2	d7 " 16
M7 " 2	d5 " 20
M2 " 3	d7 " 20
M7 " 3	m7 " 21
M7 " 3	m7 " 22
M2 " 3	m7 " 25
d5 " 4	m7 " 25
m7 " 4	M2 " 26
m7 " 6	m7 " 27
m7 " 10	A2 " 28
m7 " 12	M7 " 29
M2 " 13	m7 " 31

m7 (2) Measure 32



Sonaten VIII. Allegro Moderato. Number of measures examined.....37. Number of dissonances discovered ...22.

M7	Measure	1	d7	Measure	15
m7	"	2	m7	"	16
m7	"	4	d5	"	21
d5	"	5	m7	"	25
d7	"	5	m7	"	27
m7	"	8	m7	"	30
m7	"	9	m7	"	35
A4	"	10	m7	"	37
m2	"	12	m7	"	22

7 Measure 37

Symphony No. 13 #6, "Surprise" Violin and Piano (Fischer Edition) Number of measures examined .....51. Number of dissonances discovered .....27.

m7	Measure	2	M7	Measure	20
m7		3	M2	"	23
m7		5	m7	"	26
m7		6	m7	"	27
m7		7	m7	"	31
m7		8	M2	"	32
m7		9	m7	"	33
m2		10	m7	"	24
m7		11	m7	"	37





(Surprise Cont'd)

m7	Measure	12	m7	Measure	17
m7	"	13	m7	"	39
M7	"	14	m7	"	42
M7	"	16	m7	"	44
		M2 Measure	45		

"The Creation" first part (Schirmer Edition). Number of measures examined .....177. Number of unprepared dissonances discovered.....66.

m7	Measure	2	M2	Measure	77
m7	"	3	m7	"	98
M7	"	4	m7	"	99
m7	"	4	m7	"	101
d7	"	6	m7 (2)	"	102
d5	"	6	m7	"	103
M2	"	6	M7	"	104
m7	"	7	M7	"	107
m7	"	9	m7	"	108
m7	"	15	m7	"	110
m7	"	19	A5	"	119
m7	"	23	M7	"	120
d7	"	25	m7	"	121
d5	"	25	m7	"	124
m7	"	25	M7	"	130
M7	"	27	m7	"	32



A2	Measure	32	M7	Measure	71
d5	"	33	M7	"	73
d7	"	33	m7	"	133
m7	"	41	m7	"	140
m7	"	42	m7 (2)	"	141
m7	"	46	m7	"	147
m7	"	49	m7	"	148
M7	"	50	m7	"	158
m7	"	50	m7	"	162
m7	"	53	m7	"	168
m7	"	60	m7	"	169
m7 (2)	"	61	m7	"	170
m7	"	64	m2	"	172
m7 (2)	"	65	M2	"	175
m7	"	66	m7	"	177

Quartette. C. dur. (Kaiser) Op. 76. No. 3 Allegro  
(Payne's Kleine Partitur Ausgabe. No. 77) fur 2 violins, viola  
and violoncello. Number of measures examined ....25. Number  
of unprepared dissonances discovered....17

m7	Measure	2	m2	Measure	8
A2	"	4	m7	"	8
m7	"	13	m7	"	10
M7	"	13	m7	"	11
m7	"	4	M7	"	14
d2	"	8	27 (2)	"	17



m7	Measure	18	A2	Measure	19
m7	"	19	m7	"	24

Quartette (Sieben Worte) Op. 51 (No. 162) Number of measures  
 examined.....25.      Number of unprepared dissonances discovered  
 ....24.

Introduction.

m7	Measure	1	m7	Measure	5
m7	"	2	m7	"	7
A4	"	2	d7	"	8
			m7	Measure	4

LARGO

m7	Measure	1	M7	Measure	14
m7	"	3	m7	"	15
m7 (2)	"	4	m7	"	16
m7	"	5	m7	"	18
m7	"	6	m7	"	19
m7	"	7	M7	"	20
m7	"	10	M7	"	20
			m 7	Measure	13



Sonaten Band II. No. 11-20. (Edition Peters)

Total Number of measures examined .....247. Number of unprepared dissonances discovered .....66.

Number 11.

M7	Measure	1	m2	Measure	16
m7	"	5	m7	"	17
m7	"	7	M7	"	18
M7	"	11	m7	"	26
m7	"	15	M7	"	28

Number 12.

m7	"	1	A6	"	13
M2	"	1	m7	"	14
m7	"	11	m7	"	16
m7	"	12	m7	"	20

M7 Measure 28

Number 13

m7	"	5	m7	"	8
d7	"	6	m7		9
m7	"	6	m7		13

A2 Measure 15

Number 14

m7	"	11	(22 measures examined)		
----	---	----	------------------------	--	--

Number 15

m7	"	1	m7	Measure	26
M7	"	5	A2	"	26
m2	"	10	M7	"	27





Number 15. cont'd.

m7	Measure	12	m7	Measure	24
m7	"	20	M7	"	25

m7 Measure 29  
(31 measures examined)

Number 16

m7	"	1	M7	"	15
m7	"	3	m7	"	16
m7	"	13	m7	"	19

m7 Measure 14.  
(19 measures examined)

Number 17

m7	"	5	M7	"	10
----	---	---	----	---	----

m7 Measure 10

Number 18

M7	"	1	m7	"	8
M2	"	4	m2	"	15
m7	"	7	M7	"	18

m 7 (2) Measure 19  
(22 measures exam.)

Number 19

m7	"	12	m7	"	29
m7	"	24	M7	"	34

m7 measure 37  
(38 measures exam.)



Number 20

m7	Measure	1	m7	Measure	12
m2	"	5	m7	"	16
m7	"	9	M7	"	17

M2 Measure 25  
(25 measures examined)

BRAHMS

Piano and Violin

Sonate G, Dur. Op. 78. (Universal Edition). Number of  
measures examined .....31. Number of unprepared dissonances  
discovered.....50.

m7 (2)	Measure	1	m7 (3)	Measure	11
m7	"	3	m7 (6)	"	14
M7	"	5	m7	"	15
M2	"	3	m7	"	15
m2	"	4	m7 (4)	"	16
d7	"	4	m7	"	17
M2	"	4	m7	"	18
d7	"	5	M2	"	19
m7	"	6	A2	"	19
m7 (2)	"	7	m7	"	21
A2	"	8	d7		22
m7	"	10	d5		22
A6	"	10	m2		23
A6	"	10	m2		23
d7	"	10	m7		25



(cont'd)

m7	Measure	26	A2	Measure	29
m7	"	28	m7	"	30
m7	"	29	m7	"	31

M2 Measure 31

Sonate - D Moll. Op. 108. Piano and Violin (Simrock Edition) Number of measures examined .....30. Number of unprepared dissonances discovered .....26.

d3	Measure	4	m7	Measure	18
m7	"	4	M2		18
m7(2)	"	5	M2		19
m7	"	9	A4 (2)		20
M7	"	9	m7		21
m7	"	11	m7		22
m7	"	12	A6		23
A2	"	13	m7		24
m7	"	14	M2		25
A4	"	16	M7		27
m7	"	17	M7		28

m7 Measure 29





Sonate - A Dur Op. 100 Piano and Violin (Universal  
Edition) Number of unprepared dissonances discovered....23  
Number of measures examined .....16

m7 (2)	Measure	1	m7 (2)	Measure	<u>6</u>
m7	"	2	m7	"	8
m7	"	3	m7	"	9
m7	"	11	m7	"	13
m7 (2)	"	12	M2	"	13
A5	"	13	m7	"	14
m7	"	4	M7	"	14
A5	"	4	m7 (2)	"	15
m7	"	5	M7	"	16

m7 Measure 16

Sonate Op. 99 for Violoncell and Piano (Simrock Edit.)  
Number of measures examined ...46..Number dissonances discovered..38

M7	Measure	1	d2	Measure	33
d7	"	1	m7	"	34
d5	"	2	m7	"	35
m7	"	4	m7	"	36
d5	"	6	m7	"	36
m7	"	7	m7	"	37
m7	"	9	m7 (2)	"	39
m7	"	10	d2	"	40
m7	"	12	m7	"	41
A4	"	14	m2	"	42
m7	"	14	M7	"	43



(cont'd)

A6	Measure	44	m7	Measure	22
M7	"	18	m2	"	25
M7	"	20	A4	"	45
M7	"	21	m7	"	46

"Ein Deutsches Requiem" Op. 45

(Theo. Kircher Edition) Number of measures examined ....177.

Number unprepared dissonances discovered.....153.

m2	Measure	1	m7	Measure	72
m2	"	2	m7 (4)	"	74
m7	"	2	m7 (2)	"	75
A2	"	2	m7 (2)	"	76
M7	"	4	M2	"	84
m7	"	6	M2	"	88
m7	"	7	m2	"	88
M2	"	8	m7	"	90
m7	"	8	M7	"	91
m7 (2)	"	11	m7	"	92
M2	"	11	m7 (2)	"	95
m7	"	12	M2	"	95
m7	"	14	m7(2)	"	96
M7	"	14	M2	"	97
m2	"	14	M7	"	98
A2	"	15	M2	"	103



d7	Measure	16	m7	Measures	104
d5	"	16	M7	"	104
m7 (5)	"	17	m7 (2)	"	105
m7 (2)	"	18	M7	"	108
M2	"	18	m7	"	111
m7	"	21	d5	"	112
M2	"	22	m7 (2)	"	113
m7	"	23	M 2	"	113
m7	"	24	m7	"	115
m7	"	25	A5	"	123
M2	"	26	M7	"	123
m7	"	26	M2	"	125
m7	"	28	d7	"	125
m7	"	33	m7 (3)	"	126
m7	"	34	M7	"	126
m7	"	35	m7 (2)	"	129
m7	"	37	M2	"	129
m7	"	38	m7	"	130
m7 (3)	"	41	m7 (2)	"	132
m7	"	41	m7 (4)	"	134
m2	"	41	M2	"	135
m7 (2)	"	42	A4	"	135
m7	"	43	M2	"	135
A2	"	48	m7 (4)	"	136
m7	"	51	A4	"	136
m7	"	55	M2	"	136



M7	Measure	137	M2	Measure	140
m7	"	60	d7	"	140
m7	"	61	m7 (3)	"	141
M7	"	65	M2	"	142
m7	"	65	m7	"	145
m7	"	66	M2	"	146
M7	"	66	m7	"	146
d7 (3)	"	67	M7	"	147
M7	"	70	m7	"	148
M2	"	70	m7	"	153
M7	"	137	m7	"	155
m7	"	138	M2	"	158
M7	"	138	m7	"	159
M2	"	139	M2	"	161
m7(2)	"	139	m7	"	162
M7(2)	"	139	M2	"	163
M2	"	140	m7	"	163
m7	"	140	a2	"	164
m7	"	165	m7	"	170
m2	"	168	m7	"	172
m7	"	169	m7	"	173
m7	"	174	M7	"	175
m7 Measure 176					





Quartette C. Moll. Op. 51. No. 1. Fur zwei violen, viola,  
and violoncell (Payne's Kleine Partitur). Number of measures  
examined....20 Number unprepared dissonance discovered ...16.

M2	Measure	15	M7 (2)	Measure	10
m7	"	15	d7	"	11
M7 (3)	"	15	m2	"	13
m7	"	7	M7	"	13
m7 (2)	"	8	m7	"	14
M2	"	9	m2	"	18

Quartette A. Moll, Op. 5 No. 2. (Paynes' Kleine Partitur Ausgabe)  
fur zwei violen, viola and violoncell. Number of measures examin-  
ed ....34. Number unprepared dissonances discovered....20.

m7	Measure	2	m7	Measure	12
m7	"	4	d7	"	13
d7	"	6	m7	"	14
d5	"	6	M2	"	14
m7 (2)	"	8	m7	"	18
A5	"	10	M2	"	20
m7	"	10	m2	"	20
m7	"	11	m7 (3)	"	29

m7 Measure 34



Sonata in F. Minor Op. 5. (Ditson Musicians' Library)

Number measures examined...79. Number unprepared disconnances 71.

Allegro Maestoso.

m7	measure	1	m7 (2)	measures	15
m7	"	2	M2	"	15
M7	"	3	d7 (3)	"	19
M7 (2)	"	3	d7 (3)	"	20
M2	"	8	M7	"	21
m7	"	9	m7	"	23
m7	"	11	d7 (2)	"	24
A4	"	12	M2	"	28
d3	"	13	m7	"	30
A2	"	13	m7 (3)	"	35
d7	"	15	A5	"	40

d5 measure 41

Andante

M2	"	3	m7 (2)	"	26
m7	"	3	M7	"	26
M2	"	4	M2	"	10
m7	"	4	A4	"	10
m7	"	5	d5 (2)	"	13
m7	"	9	d7	"	13
M7	"	20	M2 (2)	"	14
m7	"	20	M2 (3)	"	15
M2	"	21	m7 (2)	"	18
M2	"	24	M2 (2)	"	19



Andante (cont'd)

m7	Measure	19	m7	Measure	33
m7 (2)	"	29	M2	"	33
M7	"	29	M2	"	34
m7	"	32	M2	"	35
M7	"	32	M2	"	36

m7 (2) measure 38.

Waltzes Op. 39. (Ditson Edition)

Number of measures examined .....61

Number of unprepared dissonances discovered.....49

m7 (2)	Measure	2	m7 (2)	Measure	51
M2	"	4	M2		51
m7	"	7	A2		52
d7	"	8	m7 (2)		52
M2	"	12	M2		52
m7	"	14	m7		53
M2	"	15	M7		22
m7	"	15	m7 (2)		22
m7	"	17	m7 (3)		23
d7	"	18	M7		26
m7 (2)	"	21	M2		26
M7	"	38	M7		30
m7	"	41	m2		32
m7	"	43	m7		33
A4	"	46	m7		34
A4	"	49	m7		36





Waltzes (cont'd)

M2	measure	57	M2	Measure	58
M7	"	37	M7	"	58
m7	"	57	d7	"	58
M2	"	53	M7	"	60
M7	"	57	m7	"	61

Rhapsody in G. Minor Op. 79 No. 2 (Ditson Edition) Molto  
Appassionate. No. measures examined....24. No. unprepared  
dissonances discovered.....11.

A4	measure	3	A4	Measure	9
M7	"	3	m7	"	12
m2	"	6	d5	"	15
M2	"	6	A4	"	20
M2	"	8	m7	"	20

m2 measure 23



Capriccio - E. Dur. Op. 76 No. 5 (Ditson Edition)

Number of measures examined 23. Number of unprepared dissonances discovered 19.

m7	Measure	1	m7 (2)	Measure	16
M7	"	2	d7	"	18
M2	"	3	M2 (2)	"	19
m7	"	6	M2	"	20
d7	"	8	m7	"	21
M7	"	11	M2	"	21
m7	"	12	M7	"	21
m7	"	15	A4	"	23

d5 measure 23

Intermezzo Op. 76. No. 7.

Number measures examined 9. Number unprepared dissonances 10.

m2	Measure	3	d7 (2)	Measure	4
m7 (2)	"	3	m7	"	5
A5	"	3	m7	"	6

M2 (2) measure 8.

Capriccio Op. 76. No. 8

Number of measures examined 1.....13

Number of unprepared dissonances discovered...25.

m7	Measure	1	d7 (2)	measure	6
M7	"	1	m7	"	8
A2	"	1	m7	"	9



m7 (2)	Measure	2	M 2 (3)	Measure	9
d7	"		A4	"	10
m2	"		d5	"	10
A2	"		M2	"	11
m7	"		d7	"	11
M2 (3)	"		M2 (2)	"	13



## BIBLIOGRAPHY LIST

"American Encyclopedia and Dictionary".

G. F. Schwartz "Catechism of Harmony".

P. Blaserna "Sound and Music".

S. Jadassohn "Manual of Harmony".

Dickinson "Study of the History of Music" p.30.

J. F. Runciman "Another Ode to Discord".

"Musical Leader" March, 30, 1916.

London Musical Times.

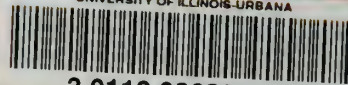
Hamilton "Sound and Its Relation to Music".







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